Remarks

I. Introduction

Claim 83 has been amended. Claim 88 has been cancelled. Claims 91-99 have been withdrawn as non-elected. Claims 84-87, 89, and 90 are also in the case.

Entry of these amendments and reconsideration of this application are respectfully requested in light of the following further Remarks.

II. The Rejections Based on 35 U.S.C. §§102 and 103

The Examiner seems to believe that applicants' drawings like FIGS. 21(a) and 21(b) do not show an annularly continuous structure. This is not correct.

FIG. 21(a) is like a flat map of the surface of the Earth (or perhaps a better analogy is that FIG. 21(a) is like a flat map of the surface of a closed ring). The upper end of the structure shown in FIG. 21(a) is actually connected directly to the lower end of that structure, so that the structure is actually a complete, uninterrupted ring. (See the purple "connected" annotation in the attached copy of FIG. 21(a). This "connected" annotation is intended to indicate what would happen if the sheet of paper on which FIG. 21(a) is drawn were rolled about a horizontal axis to bring the upper end of FIG. 21(a) into contact with the lower end of that FIG.

The fact that the structure depicted by FIG. 21(a) is actually a closed ring is apparent, for example, from the "Brief Description" of FIG. 21(a) on page 6 of applicants' specification. There it is said that "FIG. 21(a) is a planar representation similar to FIG. 2, illustrating another embodiment of the component of FIGS. 1-3." FIG. 1 clearly shows a closed ring. The "Brief Description" of FIG. 2 on page 4 of applicants' specification states "FIG. 2 is a simplified planar representation of the component of FIG. 1." In other words, FIG. 2 is just a way of showing the complete ring structure of FIG. 1 in a simplified, flat ("planar") depiction. The actual structure in FIG. 2 is the same as the structure in FIG. 1. The only difference is that in FIG. 2 it is shown flat, just like the globe-like surface of the Earth can be shown in a flat map of the Earth. The fact that a flat map has been used to depict the Earth's surface does not alter the underlying fact that the Earth is a globe. The same is true for FIG. 2, i.e., the fact that FIG. 2 shows the FIG. 1 structure flat does not alter the underlying fact that this structure is actually a closed ring.

FIG. 21(a) is described in the same terms as FIG. 2, saying (as noted above) that FIG. 21(a) "is a planar representation similar to FIG. 2, illustrating another embodiment of the component of FIGS. 1-3." (Emphasis added).

(Another point should be made about FIGS. 21(a) and 21(b). FIG. 21(b) is taken along a line like B-B in FIG. 21(a) in the attached annotated copy of these FIGS. In addition, FIG. 21(b) shows representative fingers 86g and 88g from FIG. 21(a) after release of those fingers during deployment of the device. Red and green coloring is used in the attached annotated copy to correlate representative fingers 86g and 88g from FIG. 21(a) to FIG. 21(b). It is not applicants' intention to claim that any such pair of fingers 86g and 88g come together to form a closed ring. The closed ring that applicants are claiming is the ring that results from the upper and lower ends of what is shown in FIG. 21(a) being directly connected together (as indicated by the purple "connected" annotation in the attached copy of FIG. 21(a).)

It is clear from many references in applicants' specification that all of applicants' embodiments (including the elected embodiment of FIGS. 21(a) and 21(b)) are closed rings. That is what FIG. 1 shows, and the above-quoted Brief Description of FIG. 21(a) refers back specifically to FIG. 1. There are also many references to these structures being cut or machined from a tube. (For ease of reference, the following page and line numbers refer to applicants' original specification prior to the minor amendments that have been made.) For example, at page 11, lines 1-3, applicants'

specification says: "A first step in manufacturing component 10 in accordance with the invention is to form the sheet into a cylindrical tube." "The next step involves cutting or machin[ing] the tube." (Page 11, lines 3-4.) "The starting tube is machined into the configuration (represented as a plane in FIG. 2) by laser cutting, electron discharge machining (EDM), or etching." (Page 12, lines 17-20.) "The next step is to deflect fingers on the machined tube to approximately the positions that are desired in the finished and installed connector." (Page 12, lines 26-28.) The whole thrust of applicants' disclosure is that all of its embodiments are ring structures.

Kaster U.S. patent 5,234,447 ("Kaster"), the sole prior art reference on which claims 83-87, 89, and 90 are currently rejected, does not show a closed ring. Moreover, the Office action effectively admits that Kaster does not show a closed ring. Instead, the Office action argues that applicants' elected FIGS. 21(a) and 21(b) also do not show a closed ring. But we have shown above that FIG. 21(a) is in fact a flat depiction of a structure that is actually a closed ring (like a flat map of the Earth is a depiction of what is actually the surface of a globe). Claims 83-87, 89, and 90 are therefore neither anticipated by nor obvious from Kaster.

III. The Issues Related to
Berg et al. U.S. Patent 6,391,036

The Examiner is suggesting that she will reinstate the rejection (based on 35 U.S.C. §102(e)) of claims 83-87, 89, and 90 as anticipated by commonly-owned Berg et al. U.S. patent 6,391,036 (hereinafter "Berg"). To obviate this possibility, applicants have amended claim 83 to more specifically define a structure like that shown in elected FIG. 21(a). This structure is not shown in Berg, and therefore claims 83-87, 89, and 90 are not anticipated by Berg.

To amplify what is said in the preceding paragraph, claim 83 now specifies that the annularly continuous structure includes a plurality of closed shapes, each of which has an open center, and each of which is compressible and expandable in a direction that is annular of the structure. (That is what was meant by "annular flexibility" in now-cancelled claim 88.) In the attached annotated copy of FIG. 21(a), a representative of one of these closed shapes is highlighted in yellow. The "direction that is annular of the structure" now referred to in claim 83 is the vertical direction in FIG. 21(a). Claim 83 goes on to state that all of these closed shapes are connected to one another in a single row that extends annularly around the structure. Again, this is the vertical direction in FIG. 21(a) (bearing

in mind (as is explained in detail in the preceding section of these Remarks) that the upper and lower ends of what is shown in FIG. 21(a) are actually connected to one another to form a closed ring). Claim 83 concludes by stating that the open centers of all of the closed shapes are also disposed in the above-mentioned single row.

As has been said, the structure that is now specified in claim 83 is not shown in Berg. FIG. 13 in Berg shows multiple rows of closed structural shapes (again each row is vertical in Berg FIG. 13). Thus the open centers 166 of Berg's closed shapes are disposed in such multiple rows, not all in a single row as specified by applicants in claim 83. The openings 120x and 120y in Berg FIGS. 27 and 28 are of a fixed size. They are not large enough relative to the surrounding material to be compressible and expandable, as is expressly required of the open centers in claim 83.

The foregoing demonstrates that claim 83 is not anticipated by Berg. The 35 U.S.C. §102(e) rejection of claim 83 and its dependent claims 84-87, 89, and 90 should therefore not be reinstated.

IV. Conclusion

The foregoing demonstrates that Berg et al. U.S. patent 6,391,036 is not prior art to claims 83-87, 89, and 90, and that these claims are neither anticipated by nor

obvious from Kaster. Claims 83-87, 89, and 90 are therefore allowable, and reconsideration and allowance of this application are accordingly respectfully requested.

Respectfully submitted,

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